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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/809,494	03/26/2004	Takehiko Senba	Q80450	7858

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EXAMINER
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SELBY, GEVELL V

ART UNIT	PAPER NUMBER
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2622

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/809,494

Applicant(s)

SENBA, TAKEHIKO

Examiner

Gevell Selby

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 October 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☒ Claim(s) 5-6 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments filed 10/22/07 have been fully considered but they are not persuasive. The applicant submits the prior art does not disclose the following limitations of the claimed invention:

measuring the brightness of field in halfway through change over of the aperture member from the first aperture caliber to a predetermined second aperture caliber which is relatively smaller than the first aperture caliber when a photometry of the brightness of field is impossible because of an exposure over with the first aperture caliber, and wherein the exposure control section controls the exposure in accordance with the brightness of field measured by the photometry section and an aperture caliber in a photometric timing of the brightness of field, of the aperture member, which is monitored by the sensor, when the photometry section measures the brightness of field in halfway through change over of the aperture member from the first aperture caliber to the second aperture caliber, as stated in claim 1. The Examiner respectfully disagrees.

#### **Examiner's Reply:**

Re Claim 1) The Tanaka reference discloses a the limitations of the claimed invention except measuring the brightness of field in halfway through change over of the aperture member ... from the first aperture caliber to the second aperture caliber, as stated in claim 1. The Kidono reference discloses an exposure operation control section 14 that measures the brightness of field a time T1, which is halfway between a first aperture caliber which corresponds to time 2T1 and a predetermined second aperture caliber, which corresponds to time 2T2, wherein when 2E1+S1-

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E1+S1') is greater than the target value, 2T1 is greater than 2T2 (see figure 4). The different exposure times equivalent the different aperture calibers. The applicant's reference to col. 6, lines 29-31 is irrelevant because it is not referring to times 2T1 or 2T2. Since the brightness is always measured in the halfway through change over of the aperture member from the first aperture caliber to a predetermined second aperture caliber, the measurement will also occur in the event when a photometry of the brightness of field is impossible because of an exposure over with the first aperture.

2. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, The combination allows for image recording with almost no smear and appropriate brightness.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**4. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanaka et al., US 6,693, 673, in view of Kidono et al., US 6,618,090.**

In regard to claim 1, Tanaka et al., US 6,693, 673, discloses a camera (see figure 1) incorporating therein an aperture member which is variable in an aperture caliber including a completely closed condition and changes over to an aperture caliber after an alteration with a predetermined response speed in accordance with an alteration instruction of the aperture caliber, wherein a subject light incident through an aperture of the aperture member is received by an imaging device to create image data, the camera comprising:

- a sensor (see fig. 1, element 14) that monitors the aperture caliber of the aperture member (see column 5, lines 30-34);

- an aperture control section (see fig. 1, element 13) that controls the aperture caliber of the aperture member (see column 5, lines 30-34);

- a photometry section (see fig. 1, element 12) that measures brightness of field in accordance with light quantity of received light by the imaging device (see column 5, lines 25-30), and

- an exposure control section (see figure 1, element 21) that controls an exposure in accordance with the brightness of field measured by the photometry section (see column 5, lines 25-39),

- wherein the photometry section measures the brightness of field when the aperture member is of a predetermined first aperture caliber which is a relatively

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large aperture caliber (see column 8, lines 14-18 and 39-48 and column 9, lines 57-64), and

wherein the exposure control section controls the exposure in accordance with the brightness of field measured by the photometry section and an aperture caliber in a photometric timing of the brightness of field, of the aperture member, which is monitored by the sensor (see column 5, lines 29-36).

The Tanaka reference does not disclose measuring the brightness of field in halfway through change over of the aperture member from the first aperture caliber to a predetermined second aperture caliber which is relatively smaller than the first aperture caliber when a photometry of the brightness of field is impossible because of an exposure over with the first aperture caliber, and wherein the exposure control section controls the exposure in accordance with the brightness of field measured by the photometry section and an aperture caliber in a photometric timing of the brightness of field, of the aperture member, which is monitored by the sensor, when the photometry section measures the brightness of field in halfway through change over of the aperture member from the first aperture caliber to the second aperture caliber.

Kidono et al., US 6,618,090, disclose a camera with an exposure operation/control section (14) that discloses measuring the brightness of field in halfway through change over of the aperture member (see figure 4, element T1) from the first aperture caliber (see figure 4, element 2T1) to a predetermined second aperture caliber (see figure 4, element 2T2) which is relatively smaller than the first aperture caliber when a photometry of the brightness of field is impossible because of an exposure over with the first aperture

caliber (see figure 4 and column 8, lines 25-50: two exposures are taken to measure the brightness, one at  $2T_1$  and the other at  $T_1$ , which is halfway between  $2T_1$  and  $2T_2$ ; the aperture value is changed when the exposure time is changed), and wherein the exposure control section controls the exposure in accordance with the brightness of field measured by the photometry section and an aperture caliber in a photometric timing of the brightness of field, of the aperture member, which is monitored by the sensor, when the photometry section measures the brightness of field in halfway through change over of the aperture member from the first aperture caliber to the second aperture caliber (see figure 4 and column 8, lines 25-50: the changing of the exposure time is equivalent to the changing of the aperture caliber and when the brightness is any value over the target value, the exposure time of aperture caliber is changed) .

It would have been obvious to one of ordinary skill in the art at the time of invention to have been motivated to modify Tanaka et al., US 6,693, 673, in view of Kidono et al., US 6,618,090, to have measures the brightness of field in halfway through change over of the aperture member from the first aperture caliber to a predetermined second aperture caliber which is relatively smaller than the first aperture caliber when a photometry of the brightness of field is impossible because of an exposure over with the first aperture caliber, and wherein the exposure control section controls the exposure in accordance with the brightness of field measured by the photometry section and an aperture caliber in a photometric timing of the brightness of field, of the aperture member, which is monitored by the sensor, when the photometry section measures the brightness of field in halfway through change over of the aperture member from the first

aperture caliber to the second aperture caliber, in order to allow image-recording with almost no smear and with an appropriate brightness.

In regard to claim 2, Tanaka et al., US 6,693, 673, in view of Kidono et al., US 6,618,090, discloses a camera according to claim 1. The Kidono reference discloses wherein the camera further comprises a photography timing control section (see fig. 1, element 211) that performs photography in a state that the aperture member is in the first aperture caliber and in a state that the aperture member is steadied to the second aperture caliber in accordance with whether a photometry of the brightness of field, wherein the aperture member is in the first aperture caliber, is possible or impossible, and wherein the exposure control section controls a shutter speed (see column 5, lines 56-67).

In regard to claim 3, Tanaka et al., US 6,693, 673, in view of Kidono et al., US 6,618,090, discloses a camera according to claim 1. The Kidono reference discloses wherein the camera further comprises a photography timing control section (see fig. 1, element 211) that performs photography in a state that the aperture member is in the first aperture caliber and performs photography regardless of a state that the aperture member is steadied to the second aperture caliber in accordance with whether a photometry of the brightness of field, wherein the aperture member is in the first aperture caliber, is possible or impossible (see column 5, lines 56-67), and wherein the exposure control section controls a shutter speed (it is implied the exposure control section of the Kidono reference controls a shutter speed in order to vary the exposure time), and in a case where a measurement of the brightness of field is impossible when the aperture member is in the first aperture caliber, the exposure control section controls the shutter speed in



accordance with the brightness of field measured by the photometry section in halfway through change over of the aperture member from the first aperture caliber to the second aperture caliber, an aperture caliber in a photometric timing of the brightness of field, of the aperture member, which is monitored by the sensor, and an aperture caliber in a photographic timing, of the aperture member, which is monitored by the sensor (see column 10, lines 40-53).

In regard to claim 4, Tanaka et al., US 6,693, 673, discloses a camera (see figure 1) incorporating therein an aperture member which is variable in an aperture caliber including a completely closed condition and changes over to an aperture caliber after an alteration with a predetermined response speed in accordance with an alteration instruction of the aperture caliber, wherein a subject light incident through an aperture of the aperture member is received by an imaging device to create image data, the camera comprising:

- a sensor (see fig. 1, element 14) that monitors the aperture caliber of the aperture member (see column 5, lines 30-34);

- an aperture control section (see fig. 1, element 13) that controls the aperture caliber of the aperture member (see column 5, lines 30-34);

- a photometry section (see fig. 1, element 12) that measures brightness of field in accordance with light quantity of received light by the imaging device (see column 5, lines 25-30), and

an exposure control section (see figure 1, element 21) that controls an exposure in accordance with the brightness of field measured by the photometry section (see column 5, lines 25-39),

wherein the photometry section measures the brightness of field when the aperture member is of a predetermined first aperture caliber which is a relatively large aperture caliber (see column 8, lines 14-18 and 39-48 and column 9, lines 57-64), and

wherein the exposure control section controls the exposure in accordance with the brightness of field measured by the photometry section and an aperture caliber in a photometric timing of the brightness of field, of the aperture member, which is monitored by the sensor (see column 5, lines 29-36);

wherein the camera further comprises a photography timing control section (see fig. 1, element 211) that performs photography in a state that the aperture member is in the first aperture caliber and performs photography regardless of a state that the aperture member is steadied to the second aperture caliber in accordance with whether a photometry of the brightness of field, wherein the aperture member is in the first aperture caliber, is possible or impossible (see column 5, lines 56-67), and

wherein the exposure control section controls a shutter speed (it is implied the exposure control section of the Kidono reference controls a shutter speed in order to vary the exposure time) and an exposure is corrected on the created image data (see column 9, lines 30-35).

The Tanaka reference does not disclose measuring the brightness of field in halfway through change over of the aperture member from the first aperture caliber to a predetermined second aperture caliber which is relatively smaller than the first aperture caliber when a photometry of the brightness of field is impossible because of an exposure over with the first aperture caliber, and wherein the exposure control section controls the exposure in accordance with the brightness of field measured by the photometry section and an aperture caliber in a photometric timing of the brightness of field, of the aperture member, which is monitored by the sensor, when the photometry section measures the brightness of field in halfway through change over of the aperture member from the first aperture caliber to the second aperture caliber, and in a case where a measurement of the brightness of field is impossible when the aperture member is in the first aperture caliber, the exposure control section controls the shutter speed regarding as the brightness of field measured by the photometry section in halfway through change over of the aperture member from the first aperture caliber to the second aperture caliber being measured when the aperture member is in the second aperture caliber.

Kidono et al., US 6,618,090, disclose a camera with an exposure operation/control section (14) that discloses measuring the brightness of field in halfway through change over of the aperture member (see figure 4, element T1) from the first aperture caliber (see figure 4, element 2T1) to a predetermined second aperture caliber (see figure 4, element 2T2) which is relatively smaller than the first aperture caliber when a photometry of the brightness of field is impossible because of an exposure over with the first aperture caliber (see figure 4 and column 8, lines 25-50: two exposures are taken to measure the

brightness, one at  $2T_1$  and the other at  $T_1$ , which is halfway between  $2T_1$  and  $2T_2$ ; the aperture value is changed when the exposure time is changed), and wherein the exposure control section controls the exposure in accordance with the brightness of field measured by the photometry section and an aperture caliber in a photometric timing of the brightness of field, of the aperture member, which is monitored by the sensor, when the photometry section measures the brightness of field in halfway through change over of the aperture member from the first aperture caliber to the second aperture caliber (see figure 4 and column 8, lines 25-50: the changing of the exposure time is equivalent to the changing of the aperture caliber and when the brightness is any value over the target value, the exposure time of aperture caliber is changed), and in a case where a measurement of the brightness of field is impossible when the aperture member is in the first aperture caliber, the exposure control section (see figure 1, element 14) controls the shutter speed (it is inherent the shutter speed it controlled in order to vary the exposure time) regarding as the brightness of field measured by the photometry section in halfway through change over of the aperture member from the first aperture caliber to the second aperture caliber being measured when the aperture member is in the second aperture caliber (see figure 4 and column 8, lines 60-64: the exposure measurement taken at  $T_n$  is used to determine the exposure time or shutter speed for the image capture).

It would have been obvious to one of ordinary skill in the art at the time of invention to have been motivated to modify Tanaka et al., US 6,693, 673, in view of Kidono et al., US 6,618,090, to have measures the brightness of field in halfway through change over of the aperture member from the first aperture caliber to a predetermined

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second aperture caliber which is relatively smaller than the first aperture caliber when a photometry of the brightness of field is impossible because of an exposure over with the first aperture caliber, and wherein the exposure control section controls the exposure in accordance with the brightness of field measured by the photometry section and an aperture caliber in a photometric timing of the brightness of field, of the aperture member, which is monitored by the sensor, when the photometry section measures the brightness of field in halfway through change over of the aperture member from the first aperture caliber to the second aperture caliber, and in a case where a measurement of the brightness of field is impossible when the aperture member is in the first aperture caliber, the exposure control section controls the shutter speed regarding as the brightness of field measured by the photometry section in halfway through change over of the aperture member from the first aperture caliber to the second aperture caliber being measured when the aperture member is in the second aperture caliber, in order to allow image-recording with almost no smear and with an appropriate brightness.

*Allowable Subject Matter*

5. Claims 5 and 6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gevell Selby whose telephone number is 571-272-7369. The examiner can normally be reached on 8:00 A.M. - 5:30 PM (every other Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lin Ye can be reached on 571-272-7372. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

gvs



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